ONTARIO
FISH AND WILDLIFE
REVIEW

Vol. 8, No. 2 Summer, 1969

ONTARIO

DEPARTMENT OF LANDS AND FORESTS

HON. RENE BRUNELLE, MINISTER

G. H. U. BAYLY, DEPUTY MINISTER

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THE COVER

When is a lake accessible to anglers? . . . When it has fish. The illustrated jet-copter represents the importance of small off-the-track lakes and the extra effort needed to keep some of them attractive to anglers. D. R. Hughson offers more views and details on Page 9. For the back cover, T. Jenkins lensed a red tailed hawk, eight weeks old.

ONTARIO FISH AND WILDLIFE REVIEW is published four times per year by the Department of Lands and Forests (Fish and Wildlife Branch), Parliament Buildings, Toronto 182, Ontario.

EDITORIAL

Sportsmen are familiar with the many local "fish derbies" and "big buck" contests. Usually these are sponsored by a commercial firm, a local rod and gun club, a service club or similar group to spark interest in angling and hunting. Perhaps some contests are run, hopefully, to inculcate an awareness of conservation principles among the participants. The question is—do they?

Regularly, we see photographs of an angler or hunter proudly posing beside his trophy, be it a thirty-pound lake trout or a twelve-point buck, and being congratulated by the contest sponsor. The lucky recipient is hailed as a great conservationist but there is no mention of what he has done to aid the conservation cause. Has he headed a committee spearheading some worthwhile conservation project in his home community? Has he taught his children about the uses and abuses of land? Has he contributed towards safeguarding the environment from pollutants, soil erosion or chemical sprays? Just what has our prize-winning "conservationist" done lately?

We suspect that all too often these contests are run, not so much to focus attention on conservation matters, but to advertise the sponsor's product or at least to bring him a modicum of reflected glory. We dislike the misplaced emphasis on largeness of size, especially in fish derbies. Who can blame the many anglers that concede a fish "just ain't a fish unless it's a lunker". Completely unstressed is the value of fishing as a healthful recreational activity.

Then again, is it any wonder we have difficulty in convincing the diehard deer hunter of the reliable method of determining the age of his animal and the necessity for this information when so much space is devoted to the cult of the giant buck with so many points on its antlers. Forgotten and ignored throughout is the need to harvest does and fawns to reduce over-browsing and winter mortality.

We would prefer to see the misguided zeal and prizes channelled towards rewarding those sportsmen who have voluntarily made significant contributions in the conservation field. How much better to recognize and say "thank you" in a tangible way to one thoughtful and conscientious conservation leader than to fan the egotistical flames of a hundred "lucky" contest winners!

After being tagged, this doe was left alone to relax and recover.

CAPTURING DEER WITH DRUGS

by L. L. Trodd
Conservation Officer, Pembroke Forest District
(Photos by the Author)

An attempt was made to capture and tag deer in Pembroke Forest District during the winter of 1966-7 to gather information on movements of deer from their wintering areas to summer areas. It was hoped that the results would also shed a little light on where the animals are to be found during the hunting season.

Deer are captured by using guns which project a dart-syringe loaded with an immobilizing drug. Two types of guns were used: a gas-powered (carbon dioxide) rifle and a .32 calibre shotgun specially designed to accept a .22 calibre shell.

The gas-powered rifle has a very limited range (0-40 yards) and the power varies with the outdoor temperature the colder the temperature, the less the power. Furthermore, it was difficult to load the gas cartridges and to arrive at any degree of success without considerable practice. Despite these disadvantages, the weapon can deliver a syringe with low velocity and with a quiet report that does little to startle the animals.

The powder-charged shotgun is easier to load and shoot accurately. It has a much higher velocity and consistently propels the dart over a longer range (25-70 yards) with a relatively flat trajectory. The report, though sharper than that of the gas-powered gun, does not seem to alarm the target animals.

The dart is the automatic projectile type. Upon contact with the target, a rubber plunger is driven forward by a small explosive charge in the dart, forcing the drug through the needle and into the animal. The dart worked without a single failure in this project.

For consistent results, it was found that darts should be completely disassembled on completion of tagging activities, even if unused. Darts that had been fired required thorough cleaning. Dipping a loaded syringe in a jar of vaseline prevented the drug from leaking out the needle-like tip. A light smear of vaseline prevented the rubber plunger from sticking to the inside of the dart.

The drug used was succinylcholine chloride, a muscle immobilizer which rendered the animal unable to command any control of voluntary muscles.

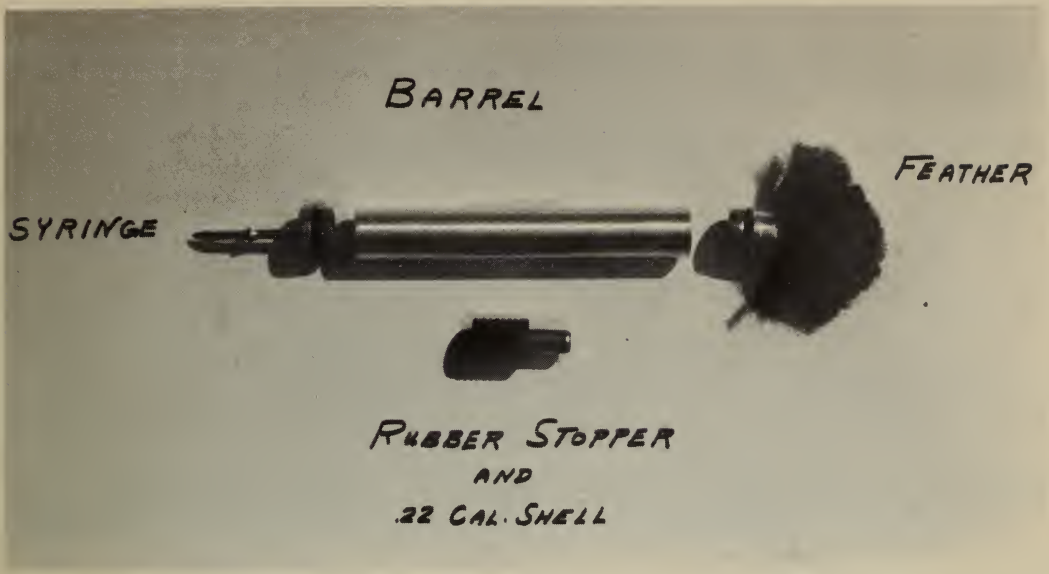
The area of the animal where the drug was injected appeared to govern immobilization time. For example, an injection into a large muscle, such as the ham, required more time to take effect than one striking directly into the blood system.

After experimenting, it was felt that the minimum effective dose to wintering deer

EDITORS' NOTE: One of the most important deer management programs is that of habitat improvement. To assess its value it is desirable to know where the deer (that profit by winter habitat manipulation) are during the hunting season. One of the ways of accomplishing this is to capture deer in treated areas during the winter, mark them, and see where they turn up during the following seasons. This article describes some of the capture and tagging procedures.

Attaching a newly designed rubber collar being tested for durability.

Tagged doe, on her feet and moving normally thirty minutes after injection.



Display of the automatic projectile dart. When it strikes, the rubber plunger is driven forward, forcing the drug through the needle into the target deer.

was 1 cc (20 mg/cc). Larger animals were not immobilized for as long a time as smaller ones, but all animals hit were completely paralyzed. No maximum dose was arrived at, but it is felt that few deer could tolerate 2 cc of the drug. An antidote, prositgmin (0.5 mg/cc) was carried at all times in 1 cc vials.

The main problem was getting deer within the limited range of the gas gun which was the only gun available during the early stages of the program. Three different methods of approach were tried.

The first attempt was to stalk the deer on foot in their winter yards. Because deer were extremely wary of moving humans, it was very difficult to approach within dart-gun range.

The second method, also unsuccessful, was to try to hold the deer in a beam of strong light at night. Inability to select a target area on the animal and difficulty in estimating ranges made this technique unrewarding. In addition, darts were easily lost in the snow and much time was wasted trying to locate them.

As winter progressed and the deer concentrated on south-facing slopes, the third and most successful method was developed. It consisted of driving to such an area and shooting directly from the vehicle. It is interesting to note that deer are frightened less by a vehicle than a man on foot. All deer which were successfully tagged were immobilized using this method.

Three different types of tags were used on each deer in this project. The first was a numbered metal ear tag of the type used successfully on domestic cattle.

The second, attached to the ear tag, was a fluorescent plastic ribbon, four inches long and one inch wide. This ribbon enables observers to identify the deer from a distance by the ribbon colour patterns.

The third was a newly designed rubber collar which was being tested. If any of the tagged deer were harvested, it would be possible to assess the collar's durability.

The following is the type of information recorded in field notes after a deer is hit. It shows the variability of conditions encountered and the reaction of the deer to the dose administered.

Deer # C-10

Date: April 3, 1967

Weather: cloudy, cool

Sex: doe (pregnant)

Dose: 1 c.c. succinyl choline chloride

Time shot: 2 p.m.

Location of injection: low on left hind quarter

Reaction time: 3 min., 52 seconds.

Distance travelled between time of injection and immobilization:
150-200 yds.

General Observations:

-jumped when hit by dart - immediately brought left hind leg forward and head backward to investigate area of injection. Looked at vehicle for few seconds - moved swiftly for several paces and lay down - never lost control of neck and head - vision seemed well-controlled - tongue remained normal pink colour.

- collar, ear tag and plaster marker attached quickly
- 30 minutes from time of injection deer normal and moving under own power
- no antidote needed
- animal reacted favourably.

Note. Beware of attempts to kick when not fully immobilized both before drug takes effect and after it begins to wear off.

Deer # C-11

Date: April 3 1967

Weather: cloudy, cool

Sex: doe (large animal)

Dose: 1 cc succynyl choline chloride

Time shot: 3:50 p m.

Location of injection: back part of right shoulder

Reaction time: 3 minutes, 20 seconds

Distance travelled between time of injection and immobilization:
100 yards

General Observations:

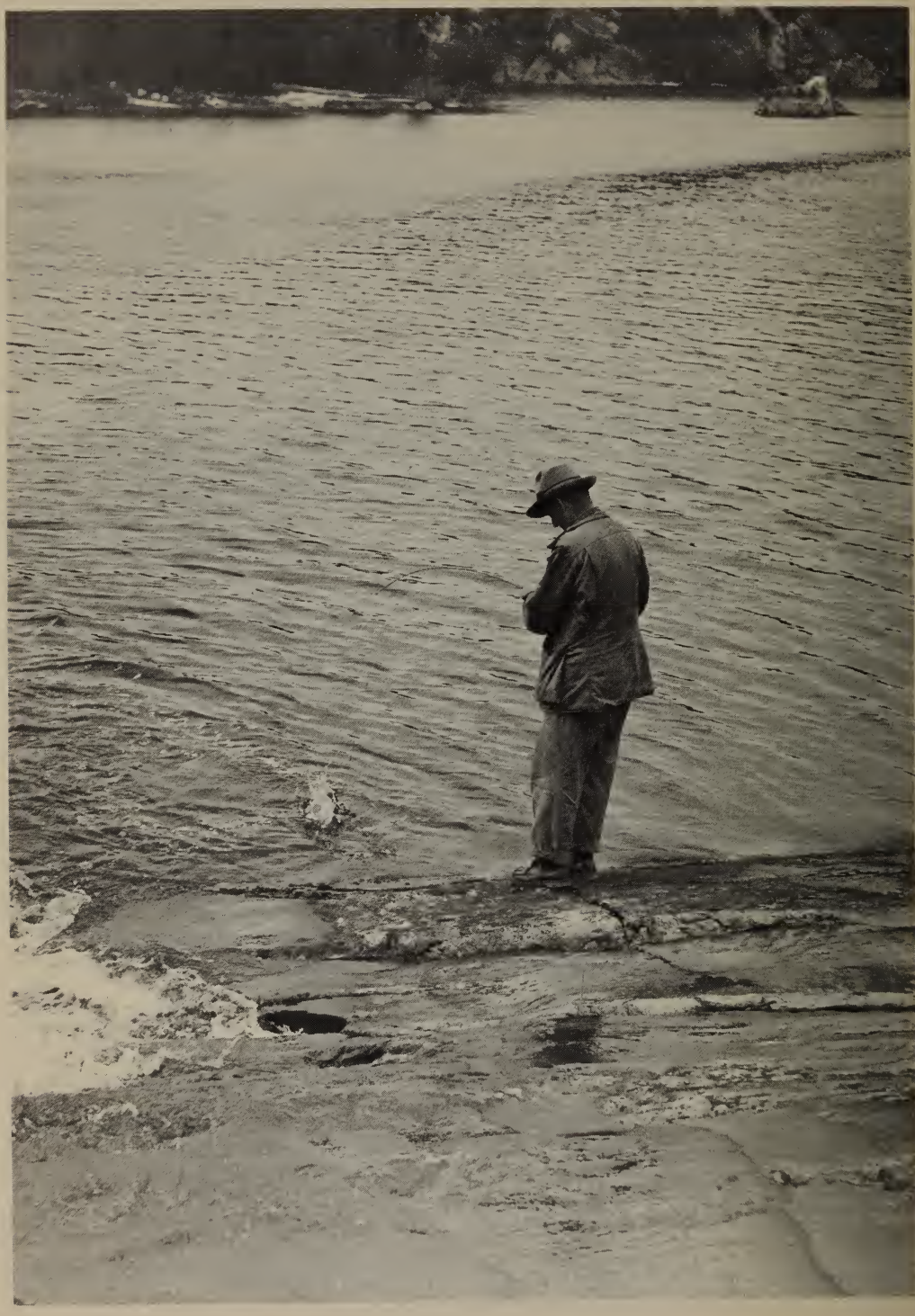
- ended up with head at lower level than body after drug took effect. We immediately reversed her position to prevent choking. Deer accepted handling in a relaxed manner. - some difficulty holding head erect.

- after tagging, we watched deer from a distance

- 30 minutes after injection, deer walked away.

- no antidote needed.

Note: Animals must be located as quickly as possible after becoming immobilized allowing 3-4 minutes for drug to take effect. Failure to locate an animal soon after immobilization could result in it suffocating or choking after it loses control of its voluntary muscles.



A fighting brook gives his all–a reward to the angler who treks through bush to off-the-track lakes where the fishing isn't crowded. Staff photo.

BROOK TROUT PLANTING BY HELICOPTER

by D. R. Hughson
Fisheries Management Officer, Sudbury Forest District

The helicopter is one of the newest tools being used to overcome the difficulties and complications encountered in planting brook trout in some of our important "pack-in" lakes. These lakes are one-half mile or more from a bush road or accessible lake. Because they are small in size (10 to 40 acres) fixed-wing aircraft cannot be landed to plant fish.

Information gathered by Conservation Officers shows that winter and summer angling pressure is heavy, with anglers enjoying good success. Since no known natural reproduction occurs in these lakes, the population must be sustained by hatchery plantings.

As stated by J. M. Fraser, Research Branch, Department of Lands and Forests, in his report, Differential Recovery of Brook Trout Planted by Hand and by Air Drop:

Air dropping of trout while proving successful to some degree has not produced the return to the angler or to test netting that shore plantings have as indicated by experiments in this field.

Although shore planting is the most successful way of stocking these lakes, three major problems were encountered in using this method. Impassable bush road conditions in early spring precluded the use of hatchery trucks or other available vehicles. It was often difficult to obtain enough assistance to back-pack the fish from the road to the lake. Finally, the delay in packing fish from the truck to the lake was sometimes so great that the fish were in stress condition when they were planted.

With the ever greater demands being placed on our fisheries resources, it becomes increasingly important that we obtain maximum survival from plantings. From the standpoint of fish handling, the transfer of trout from the hatchery truck to the pack-in lake has been a weak link in the chain. It is this stage which needs improvement, and the helicopter was the obvious answer.

Arrangements were made to obtain a Bell G-4 helicopter for trial fish plantings in a group of pack-in lakes. Trips were planned a week in advance so that other Department work could be carried out while the helicopter was in the area. Due to the spring fire hazard, all plantings had to be made before noon. This necessitated the truck leaving the hatchery at 7:00 a.m. to reach the rendezvous by 10:00 a.m.

Fish were carried in plastic bags, 24" x 36", each of which contained approximately two gallons of water and 500 yearling brook trout. The air was squeezed from the bag which was then filled with oxygen and tied.

Four large cardboard boxes were tied securely on the carrying racks on the helicopter, and two plastic bags of fish were stood upright in each. Thus, 4,000 fish could be carried on each trip. On short trips (less than 20 minutes), by putting more fish in the bags, it was possible to carry up to 6,000.

There are two principal points that must be considered in helicopter plantings. First, to reduce the amount of expensive helicopter flying time, it is important to bring the fish by truck to a location central to the lakes being stocked or to be able to move the truck along the route from one landing location to another.

Second, it is necessary to have a clearing on the shore of the lake being planted so

that the pilot can either let off a passenger, who can release the fish on the pilot's side, or land in the clearing and plant the fish from the shore. In all cases, the fish are released in an area along the shore with good natural cover. Using these techniques, a total of 41,000 brook trout were planted in fifteen pack-in lakes.

Although the operation went smoothly, planting fish by helicopter is an expensive method. A fixed-wing aircraft, the DeHavilland Turbo Beaver, costs $50.00 per hour in comparison with $108.00 per hour for the Bell G-4 helicopter. The total cost of planting 15 pack-in lakes was $1,112.00 for 10 hours and 20 minutes of flying time using the helicopter. The cost of the same planting, using the fixed-wing aircraft and dropping the fish, would be approximately $400.00

While an increased cost of $700.00 for planting 41,000 yearling trout is quite high (1.7 cents per fish), the anticipated increased survival and return to the angler justifies the expenditure. Fraser indicates the difference in recovery is 21 per cent in favour of shoreline hand planting. The extension of this to dollar value for 20 per cent of 41,000 at 20 cents per fish (average hatchery cost of these fish) is $1,600.00. Thus in reality, the additional helicopter cost is more than offset by the increased numbers of fish available to the angler.

It should be borne in mind that approximately half the helicopter time is spent in travelling to the planting areas. When the helicopter can be used for other Department activities in the same locality, the cost can be considerably reduced.

By using a larger helicopter such as the Jet Ranger, oxygen-equipped tanks could be developed and carried inside. Its increased speed and payload would greatly improve the operation.

It is expected that greater use of helicopters in our stocking program, along with other improvements being made in hatchery production and fish management, will help to maintain or improve our sports fishery resources in Ontario.

The end product of all our endeavours in game fish management is the fish in the angler's creel, and it is to this goal that modernization of our techniques is aimed.

Jet Ranger helicopter at a small lake with hatchery-reared brook trout which will be released close to shore in an area with good natural cover. Photo by D. R. Hughson.

WHERE THERE'S SMOKE THERE'S FLAVOUR

by Steve Crooks
Biologist, Sioux Lookout Forest District
(Drawing by the Author)

How many times have you returned from a successful trip loaded with fish only to find out that within a few short rounds of fried, baked, broiled or poached fish, you were, gastronomically speaking, fished out? Or to find that there was not enough room in your freezer or your wife's mind to do anything with the fish but have a token fish dinner and then give the rest away? How often have you had to suppress that craving for smoked eel or whitefish when you found that what you wanted was either not available or selling at $1.00 a pound and up?

Why not smoke your own? It's simple and inexpensive. Materials used can range from a $3.00 garbage can through a discarded refrigerator and up to and beyond a small portable smoker available at low cost from several outlets. With these materials you can change even trash fish, that you would normally throw back, into a treat that will really titillate your taste buds.

Before you pick up your hammer and saw, there are certain things you should know. The most important thing is that there are two types of smoking: hot smoking and cold smoking.

In hot smoking, the lightly brined fish is smoked and cooked in one relatively short operation, and it is eaten either cold as-is or reheated before eating. The refrigerator life of hot-smoked fish is one to two weeks.

Cold smoking is more time consuming and requires a lot of attention. The method in cold smoking is to smoke the fish for four to five days while maintaining a temperature of around 90 to 100 degrees the whole time. Cold-smoked fish must be freshened in cold water before eating, but the finished product will keep nearly indefinitely if stored in a cool, dry place.

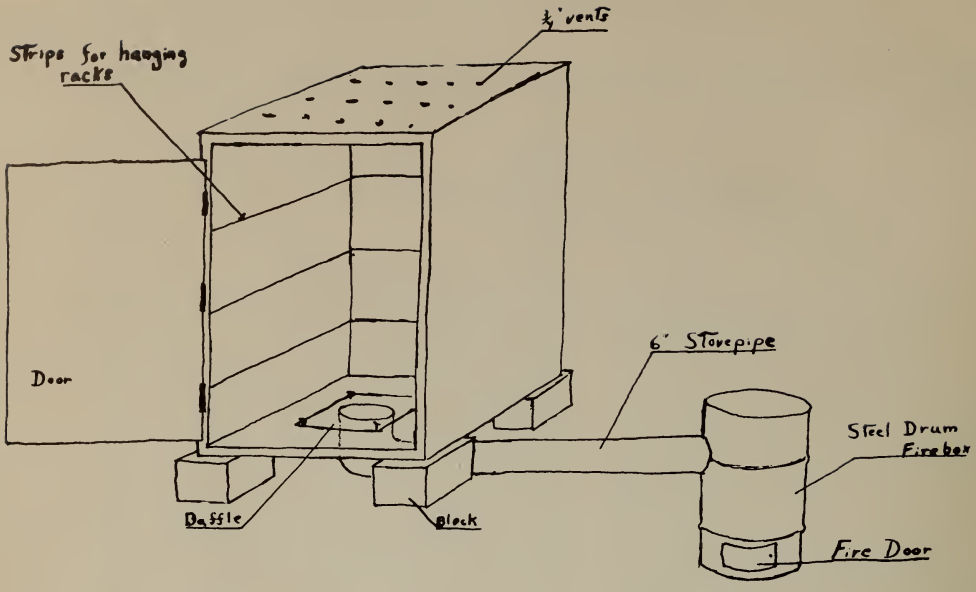
By now you've probably decided the kind of smoker you're going to build, and the odds favour a hot smoker.

If you are one of those people who are all thumbs when it comes to using any tools at all, your best bet is to buy a smoker. One of these units resembles a rectangular bread box set on end, with an electric heating element in the bottom and a receptacle for woodchips or sawdust set close above the heating element. Racks or crossbars are above the element, and this is where you lay or hang your fish (or meat). All the rest of the hot smokers I will describe are modifications of this idea.

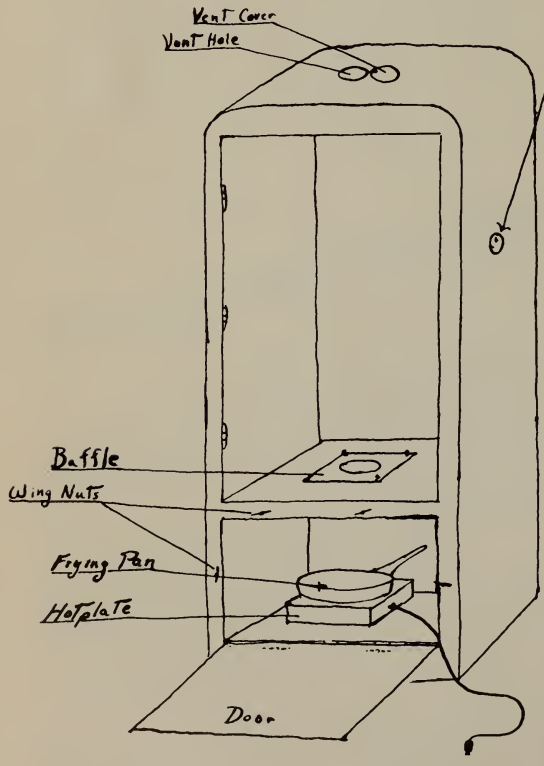
If you are fairly, or even somewhat feebly, adept with tools, you may wish to take a cheaper route and build one of the following two smokers.

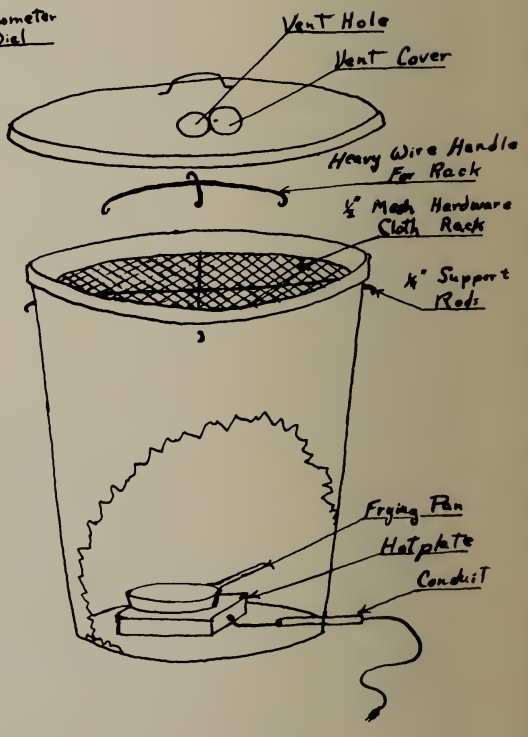
The refrigerator smoker consists primarily of a discarded refrigerator with the box and door intact. It's also helpful if the racks are available. In addition you will need a hotplate, a cast iron frying pan, some sheet metal, and some ¼-inch rods on which to string the fish.

In place of the motor and compressor unit will be the hotplate and the frying pan which will be filled with sawdust or woodchips. Since you want the sawdust or chips to smoulder, not burn, you will need to make the compressor compartment sufficiently airtight to prevent the wood from flaming up. This can best be done with sheet metal, leaving the front sheet door-like to permit access to the "firebox." You will also need to cut a six-inch hole in the bottom of



Cold Smoker





Hot Smokers

Carl Mueller

the box to let the smoke in. About three inches over this hole, install a baffle to spread the smoke within the box. The baffle may be made from a piece of sheet metal.

It may also be desirable to cut an outlet in the top of the box; this is useful in controlling heat and moisture in the box when smoking. This hole should be covered with a flush-fitting piece of sheet metal, held down by one screw so that it may be pivoted to cover more or less of the hole. If you want to regulate the temperature, you will need to drill a small hole to insert a thermometer. However, this is only for the fanatic of smoking.

If your wife (if you're so blessed) is like mine and falls somewhat short of being ecstatic about the idea of having a junked refrigerator added to the other home decorations, a handily-hideable garbage-can smoker may be a lot more acceptable to both your family and any close neighbors. One consolation with this model is that if you decide that the smoker has got to go, you can still use it for a garbage can.

Start with a CLEAN, NEW, large-sized METAL garbage can. It needn't be top quality as it's only going to hold smoke. Then get a piece of ½-inch-mesh hardware cloth big enough to cover the top of the can, a cast iron frying pan, a hotplate, two ¼-inch rods as long as the diameter of the can at the top, and a foot of ½-inch electrical conduit.

Start by drilling four ¼-inch holes about three inches below the rim of the can. These are for the rods to support the hardware cloth which you should cut so that it easily fits into the can. Next cut a hole about an inch from the bottom of the can big enough to let the conduit slip through but not so big that a lot of air can enter the can during the smoking process. The conduit is for the hotplate lead and protects it from moisture which drips from the edge of the can lid. This moisture will otherwise short out the lead wire, causing that big blue flash that means you're out of business.

After you've put the hotplate inside the can on the bottom, and run the lead through the conduit (you'll have to disconnect the lead to do it), fill the frying pan with wood chips and lay the hardware cloth rack in on top of the crossed ¼-inch rods. All you need now is the fish.

The choice of fish is your own, but I recommend oily-fleshed fish. Examples would be eels, carp, salmon, whitefish, trout and ciscoes. I tried smoking suckers but found that smoking did nothing to alleviate the boniness. Lampreys are good if they're very fresh.

After thoroughly cleaning the fish, split them. If they're very large, they should be filleted. Then brine them. I have found that for my tastes, soaking the fish in a saturated salt solution for two to three hours yields satisfactory results. You may prefer a shorter brining period or adding sugar or spices or both to the brine.

When brining is over, all you have to do is lay the fish out on the hardware-cloth rack or refrigerator racks, close the door or put on the lid, and start the hotplate going under the frying pan of wood chips. Be sure the fish are not touching each other as this would not let the smoke penetrate properly. Let the fish smoke for a couple of hours and then start testing. The flesh should be smoky flavoured and firm but not rock-hard.

If you're really serious about smoking and want to preserve some fish by that means, then you'll want to try cold smoking. Your choice of wood for both hot and cold methods can extend to any non-resinous hardwood. Different woods give different tastes. Some suggested kinds are apple, willow, maple, hickory, corn cobs, alder, beech, birch, and sycamore. I prefer apple wood for fish. The wood need not be seasoned and will last longer if green. You might have to sprinkle the wood with water occasionally to keep it from flaming.

You can make one cold smoker with a fair capacity out of a four-foot cube of ¼-inch plywood using a 45-gallon steel drum for a firebox. The cube has racks inside,

The choice of fish is your own, but these smoked Lake Huron whitefish would tempt the taste buds of any connoisseur. Photo by J. B. Dawson.

¾-inch vent holes in the top, a door, and a one-foot-square baffle over the smoke inlet. Smoke is fed into it via an eight-foot length of six-inch stovepipe that runs from the top side of the steel drum. It has an 8 x 12-inch firedoor cut near the bottom, and the cut-out piece is used for the door. A six-inch hole is cut near the top of the drum to admit the stovepipe.

The smoking operation starts with a thorough cleaning of the fish, leaving the heads on if desired. They are then split, dredged in salt and packed with additional salt in crocks or enameled containers. After one to three hours, the fish are rinsed in brine and allowed to dry on a rack until a thin film forms on them. This may take two to three hours, and while they are drying you should start the fire going in the smoker. When the fish are dry, string them on rods or lay them on racks as close together as possible without touching. Place the loaded racks or rods in the smoker.

The smoke inside should be kept only moderately dense for the first eight to twelve hours. After that, it must be kept as dense and cool as possible and should not feel warm to the hand. Don't let the fire go out or blaze up; you will have to get up nights to tend the fire as the fish must be smoked four to five days if you want them to keep.

After they're smoked, let them air dry for a few hours, give a heavy coat of salt, and wrap up in cellophane, waxed paper or plastic. Store in a cool, dry place—a temperature of around 50 degrees would be about right. When you are ready to eat them, just freshen in cold water.

Once you've smoked some fish, pass it around to your friends. You'll be surprised at the number of people who'll want to know how you did it so that they can take a crack at it too.

Eels from Lake Ontario—delicious when smoked. Photo by T. Jenkins.

Drugs were administered to subdue deer so they could be moved from trap to truck.

LIVE TRAPPING OF NUISANCE DEER

by J. N. Lawrence
Conservation Officer, Lake Erie Forest District
(Photos by the Author)

Deer populations fluctuate throughout the Province and most of our problems occur when there are "not enough" deer to meet the needs of the hunter. In some locations, especially in southern Ontario, deer numbers become a problem when the population is high. One such area is the thousand-acre tract occupied by Cyanamid of Canada Limited in Stamford and Thorold Townships of Welland County.

Since 1941, when the plant began operations, the property has been surrounded by an eight-foot steel-mesh fence. Initially, the plant facilities occupied only one-third of the ground, but in recent years the company's buildings, warehouses, rail yards, sludge ponds and road complexes have expanded to cover two-thirds of the tract.

The first white-tailed deer (two does and one buck) were sighted on the property in 1944 by F. P. Fisher, a Cyanamid employee. Mr. Fisher has been keenly interested in deer on the area for 25 years.

By 1953, the herd had increased to 54, mainly through natural reproduction although some deer had entered via a railroad yard gate which was open during the daylight hours. At this time, the Department was requested to thin out the herd and it was planned to crop 50 per cent. However, after the first day when seven deer were shot, intense public concern halted the operation. The emotional outcry of the public resulted in a cruel death for many deer during the subsequent winter. In the spring of 1954, Mr. Fisher discovered the carcasses of 18 fawns which had starved to death during February and March.

Despite considerable winter mortality caused by starvation, the number of deer reached an all-time high of 154 in 1959. There was a marked decline in numbers of deer between 1959 and 1960 not only on this area but throughout all of southwestern Ontario. By 1961, the herd had declined to 45 animals.

Since herd reduction by the Department was not acceptable to the public, a feeding program was initiated by Cyanamid. The deer were fed nine bales of hay per week until March when they required 18. It was found that they preferred alfalfa over timothy and blue grass. They ate corn-on-the-cob, which was fed to them as an experiment, but it was not a favoured food. In the winter of 1961-62, the feed cost over $17 per deer.

Because of expanded plant facilities and the resulting reduction in deer feeding areas, as well as the increasing problem of predation by dogs and poachers, the company asked the Department to remove the deer entirely in 1962. (In the ten years between 1958 and 1967, a total of 102 fawns was captured on the area and supplied to educational and research centres across the Province. Two of the deer were albinos which were removed to pens at Rondeau Provincial Park where they were viewed by thousands of visitors.)

Following this request, increasing numbers of deer were removed but, in 1966, despite extensive efforts, 61 animals still remained. On several occasions deer were driven out, but on the following morning they would re-enter by the open yard gates.

At this point, Dr. L. Karstad of the Ontario Veterinary College at Guelph

The O.V.C. deer traps were built with half-inch plywood, 4′ x 4′ x 10′.

approached the Department and Cyanamid of Canada with an acceptable plan for the removal of the herd by using live-traps.

In January, 1967, eight traps from Guelph were introduced to the area where the deer were fed. The traps were constructed of half-inch plywood, 4′ x 4′ x 10′, and equipped with No.1 steel traps as the trigger mechanisms. The cost of these traps was $1,400.

From this time on, the animals were fed in the vicinity of the traps. They soon became so familiar with them that they would lie down inside. Trapping was carried out by employees of the plant and the Department. Ontario Veterinary College personnel appeared only when live deer were waiting to be removed.

The first seven traps were set early in February, and in three hours, three deer had been caught. By evening, the O.V.C. vehicle (designed to carry livestock) had a cargo of ten animals.

Drs. Karstad and Fletch administered the drugs needed to subdue the deer so that they could be moved from the trap to the vehicle and on to Guelph. Three drugs were used. The first was a narcotic called M99, injected into the buttocks of the deer by a dart shot from a hand-model carbon dioxide gun.

Most animals began to react three to four minutes after the drug had been injected. When they lost their fear of a human touch and started dancing and staggering as if inebriated, they were led from the trap to the truck where two more drugs were administered with syringes. The first, M285, was administered to counteract the narcotic M99. The second drug, a slow-acting tranquillizer called chlorpromazine, calmed the deer for their two-hour journey to Guelph. Generally, excellent results were obtained using this combination of drugs.

The success of the first catch was not repeated every time the traps were set. If the ground was covered with snow, success

When drugged, deer could be led from the trap to the truck.

A No. 1 steel trap was used for the trigger mechanism in deer trap.

improved noticeably. However, if the snow disappeared, the deer would almost completely ignore the baited traps. Greater success was obtained if the traps were set in late afternoon and checked early the next morning.

Overnight sets created problems. One morning, one trap gave every indication of having held a deer overnight; however, the trap was empty. On searching the vicinity, the viscera of a pregnant doe were discovered within 30 yards of the trap. Although poaching in this area had been common, no other occurences were so bold or daring. Following this, the Company installed gates to enclose the area completely during the evenings, and all employees were warned that only authorized persons might enter this sector. As a further precaution, the trigger mechanism of each trap was locked with a numbered seal when the pens were not in use.

In total, 37 deer (15 does, 9 bucks and 13 fawns) were captured during 13 sets of the eight traps. It was estimated that approximately 20 deer remained.

Throughout the years, the presence of a deer population within the Cyanamid of Canada plant area has made it possible for close studies to be made of the deer and their habits. The knowledge and experience gained as a result of this deer trapping project will be of considerable value in future studies of deer in southern Ontario.

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Deer trap baited with hay to attract deer on Cyanamid property.